



EROSION CONTROL NOTES

SEDIMENT CONTROL SHALL BE ACCOMPLISHED BY SEEDING AND MULCHING TO ALL DISTURBED AREAS IMMEDIATELY UPON COMPLETION OF EXCAVATION OR FILL AND FINISH GRADING IN ACCORDANCE WITH DOT ITEM 609 AND/OR AS SPECIFIED BY THE O.D.N.R. RAINWATER AND LAND DEVELOPMENT MANUAL.

TEMPORARY SEEDING SHALL BE APPLIED WITHIN ALL NEW ROADWAY AREAS, UTILITY EASEMENTS AND/OR AREAS REQUIRING ONLY TEMPORARY SEEDING, AND SHALL BE PERFORMED AS SOON AS GRADING IS COMPLETED AND READY FOR RELEASE. NO RELEASE BEYOND BOX SHALL BE MADE FOR EARTHWORK ITEMS UNTIL SEDIMENT CONTROL IS IN PLACE TO PROTECT SAID WORK ITEMS.

CONTRACTOR SHALL COMPLY WITH THE MAINTENANCE SCHEDULE INCLUDED IN THE APPROVED PLANS FOR THE PROPOSED EROSION CONTROLS.

APPROPRIATE EROSION CONTROL METHODS MUST BE IN PLACE PRIOR TO ANY EARTHWORK COMMENCING.

DETENTION PONDS, SEDIMENT PONDS, AND PERIMETER SEDIMENT CONTROLS SHALL BE IMPLEMENTED AS THE FIRST STEP OF GRADING AND WITHIN SEVEN (7) DAYS FROM THE START OF GRUBBING. THEY SHALL CONTINUE TO FUNCTION UNTIL DISTURBED AREAS ARE RE-ESTABLISHED.

DISTURBED AREAS THAT WILL REMAIN UNWORKED FOR A PERIOD OF THIRTY (30) DAYS OR LONGER SHALL BE STABILIZED WITH SEEDING AND MULCHING, OR OTHER APPROPRIATE MEANS, WITHIN SEVEN (7) DAYS AFTER EARTH MOVING CEASES. PERMANENT SOILS STABILIZATION SHALL BE INSTALLED WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE.

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EROSION CONTROL, MAINTENANCE AND INSPECTIONS ON A WEEKLY BASIS AND AFTER ALL RAINSTORMS PRODUCING 1/2" PER 24 HOUR. ALL MEASURES SHALL BE REMOVED AFTER THE SITE IS STABILIZED AND/OR AS DIRECTED BY GOVERNING AGENCIES.
2. THE CONTRACTOR SHALL LIMIT THE SURFACE AREA OF ERODIBLE EARTH MATERIAL EXPOSED BY EXCAVATION, BORROW, AND FILL OPERATIONS AND PROVIDE IMMEDIATE PERMANENT OR TEMPORARY CONTROL MEASURES TO PREVENT CONTAMINATION OF ADJACENT STREAMS OR OTHER COURSES, LAKES, PONDS, WETLANDS OR OTHER AREAS OF WATER IMPOUNDMENT. LIMITS TO CLEARING AND GRADING SHALL BE CLEARLY MARKED ON SITE WITH SIGNAGE, FLAGGING AND/OR FENCING.
3. THIS WORK SHALL CONSIST OF TEMPORARY CONTROL MEASURES AS DETAILED ON THE PLANS OR ORDERED BY THE LAKE COUNTY SOIL AND WATER CONSERVATION DISTRICT DURING THE LIFE OF THE CONTRACT TO CONTROL SOIL EROSION AND SEDIMENTATION THROUGH USE OF SILT FENCES, SLOPE PROTECTION, SEDIMENT BASINS, MULCHES, SEEDING, FILTER FABRICS, DITCH LINING AND OTHER EROSION CONTROL DEVICES OR METHODS.
4. TEMPORARY EROSION AND SEDIMENT CONTROL ITEMS, THE LOCATION AND SIZE OF WHICH ARE DETAILED ON THE PLANS, SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF ANY CLEARING OR EARTHWORK OPERATIONS. TEMPORARY CONTROL MEASURES WILL BE USED WHEN AND AS DIRECTED BY THE ENGINEER TO CORRECT CONDITIONS THAT DEVELOP DURING CONSTRUCTION THAT WERE NOT FORESEEN DURING THE DESIGN STAGE, THAT ARE NEEDED PRIOR TO INSTALLATION OF PERMANENT CONTROL FEATURES OR THAT ARE NEEDED TEMPORARILY TO CONTROL EROSION THAT DEVELOPS DURING NORMAL CONSTRUCTION PRACTICES.
5. EXISTING VEGETATIVE GROWTH SHALL REMAIN UNDISTURBED AS LONG AS POSSIBLE. THE CONTRACTOR SHALL SEED AND MULCH ALL AREAS DISTURBED BY THE CONSTRUCTION AND WHICH ARE EXPOSED FOR MORE THAN 30 DAYS. SEEDING AREAS WILL BE INSPECTED, AND AREAS WHERE THE SEED HAS NOT PRODUCED A GOOD COVER SHALL BE RESEED BY THE CONTRACTOR. STABILIZE AREAS WITH MULCH WHEN CONDITIONS PROHIBIT SEEDING. STABILIZE AREAS WITHIN 50 FEET OF ANY STREAM OR WETLAND WITHIN 2 DAYS ON ALL INACTIVE DISTURBED AREAS THAT WILL REMAIN INACTIVE FOR FOURTEEN (14) DAYS OR LONGER.
6. TEMPORARY EROSION CONTROL FEATURES SHALL BE ACCEPTABLY MAINTAINED AND SHALL SUBSEQUENTLY BE REMOVED OR REPLACED WHEN DIRECTED BY THE ENGINEER. TEMPORARY AND PERMANENT EROSION CONTROL FEATURES SHALL BE RE-ESTABLISHED AFTER EACH MEASURABLE RAINFALL AND RE-ESTABLISHED AS NECESSARY. REMOVED MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF THE SITE.
7. IN THE EVENT THAT TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES ARE REQUIRED DUE TO THE CONTRACTOR'S NEGLIGENCE, CARELESSNESS, OR FAILURE TO INSTALL PERMANENT CONTROLS AS A PART OF THE WORK, SHALL BE PERFORMED BY THE CONTRACTOR AT HIS EXPENSE.
8. ADDITIONAL EROSION CONTROLS MAY BE MANDATED BY THE LAKE COUNTY SWCD.
9. ROUTINE INSPECTION WILL BE CONDUCTED ON ALL EROSION CONTROL PRACTICES FOR THIS PROJECT. THE CONTRACTOR WILL BE RESPONSIBLE FOR CORRECTING ALL DEFICIENCIES REVEALED BY THE INSPECTIONS.
10. THESE NOTES AND DRAWINGS ARE INTENDED TO SERVE AS BASIC GUIDELINES. ALL EROSION CONTROL PRACTICES SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE O.D.N.R. RAINWATER AND LAND DEVELOPMENT MANUAL.

SEEDING SPECIFICATIONS

1. TEMPORARY SEEDING AND MULCHING SHALL BE PLACED ON ALL DENUDED AREAS THAT ARE TO REMAIN OPEN FOR THIRTY (30) DAYS OR LONGER WITHIN SEVEN (7) DAYS.
2. TOPSOIL STOCKPILES SHALL RECEIVE TEMPORARY SEEDING AND MULCHING AS SOON AS STOCKPILING OPERATIONS ARE COMPLETED OR A SILT FENCE SHALL BE INSTALLED ALONG AND 5' MIN. FROM THE TOE OF THE STOCKPILE. TOPSOIL SHALL BE REPLACED AS QUICKLY AS CONSTRUCTION PERMITS.
3. SEEDING AND MULCHING IN DITCHES AND SWALES WITH STEEP GRADIENTS OF A FLOW GREATER THAN 3.5 FPS SHALL BE SECURED WITH JUTE OR EXCELLENT MATTING.

SEED TYPE

SELECT A SPECIES OF MOISTURE APPROPRIATE FOR THE SITE.

| SEED SPECIES & DATE | PER 1000 S.F. | PER ACRE |
|---|---------------|----------|
| A. MARCH 1 TO AUGUST 15 | | |
| 1) OATS OR ANNUAL RYEGRASS | 3 lbs. | 131 lbs. |
| 2) PERENNIAL RYEGRASS | 3 lbs. | 131 lbs. |
| 3) TALL FESCUE | 1 lb. | 43 lbs. |
| B. AUGUST 16 TO NOVEMBER 1 | | |
| 1) CEREAL RYE OR WHEAT | 3 lbs. | 131 lbs. |
| 2) 20/50 MIX PERENNIAL ANNUAL RYEGRASS | 3+3=6 lbs. | 262 lbs. |
| 3) TALL FESCUE | 1 lb. | 43 lbs. |
| C. AFTER NOVEMBER (SEE DORMANT SEEDING METHODS BELOW) | | |
| 1) STRAW OR HAY MULCH | 2-3 BALES | 2-3 TONS |

SEED BED PREPARATION

1. WORK THE LIME AND FERTILIZER (12-12-12 ANALYSIS, OR EQUIVALENT) INTO THE SOIL TO A DEPTH OF TWO INCHES. ON SLOPING AREAS, THE FINAL OPERATION SHALL BE ON THE CONTOUR.

INSTALLATION

1. APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDRO-SEEDER (SLURRY MAY INCLUDE SEED AND FERTILIZER) ON A FIRM, MOIST SEEDBED. COVER TO A DEPTH OF 1/4" TO 1/2", AND FIRM SEEDBED WHERE FEASIBLE.

MULCHING

1. MULCH SHALL BE APPLIED TO PROTECT THE SOIL AND PROVIDE A BETTER ENVIRONMENT FOR PLANT GROWTH CONSISTING OF SMALL GRAIN STRAW (PREFERABLE WHEAT OR RYE) AND SHALL BE APPLIED AT THE RATE OF TWO TONS PER ACRE OR 100 lbs. (TWO OR THREE BALES, PER 1000 S.F.).

MAINTENANCE

1. IRRIGATION - IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER FOR PLANT GROWTH UNTIL THEY ARE FIRMLY ESTABLISHED.
2. REPAIRS - INSPECT ALL SEEDING AREAS FOR FAILURES AND MAKE NECESSARY REPAIRS, REPLACEMENTS, RESEEDINGS, AND REMULCHING WITHIN THE PLANTING SEASON, IF POSSIBLE.

DORMANT SEEDINGS

1. SEEDINGS SHALL NOT BE PLANTED FROM OCTOBER 1 THROUGH NOVEMBER 20.
2. FROM OCTOBER 1 THROUGH NOVEMBER 20, PREPARE THE SEEDBED, ADD THE REQUIRED AMOUNTS OF LIME AND FERTILIZER, THEN MULCH AND ANCHOR. AFTER NOVEMBER 20, AND BEFORE MARCH 15, BROADCAST THE SELECTED SEED MIXTURE. INCREASE THE SEEDING RATES BY 50% FOR THIS TYPE OF SEEDING.
3. FROM NOVEMBER 20 THROUGH MARCH 15, WHEN SOIL CONDITIONS PERMIT, APPLY THE SELECTED SEED MIXTURE, MULCH AND ANCHOR. INCREASE THE SEEDING RATES BY 50% FOR THIS TYPE OF SEEDING.

| REV. No. | DATE | BY | CHK'D |
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Ralph W. Kempke Surveying
Professional Land Surveyor

LAKE COUNTY
SOIL AND WATER
CONSERVATION DISTRICT

DATE -
SCALE: HOR. -
VERT. -
FILENAME -
CHK'D BY -
F.B. No. -

STANDARD DETAILS

SHEET 2 OF 2
CONTRACT NO.